

# INSTRUCTION MANUAL

## SM55 AND SM55SST SURFACE-MOUNT SPEAKERS



### Introduction

Thank you for purchasing Sonance Surface-Mount Speakers. When properly installed your new speakers will give you years of entertainment pleasure. This manual covers the SM55 and SM55SST (Single-Stereo Technology®) speakers.

### Box Contents

Item	Quantity (SM55)	Quantity (SM55SST)
Surface Mount Speaker	2	1
Paintable Grille	2	1
Speaker Terminal Screws	4	4

### Speaker Placement

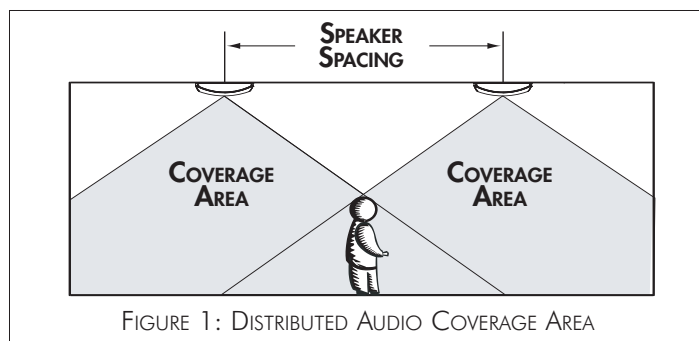
#### Distributed Audio (SM55 and SM55SST)

The SM55 and SM55SST's low installation profile makes them ideal for use in distributed audio systems. They provide coverage of a very wide listener area, allowing them to be mounted in a wide variety of installation locations.

Because a single SM55SST speaker reproduces both stereo channels from a single location, it will deliver outstanding performance from a wide variety of mounting locations where a pair of stereo speakers would be impractical, including hallways, bathrooms and closets.

The table and illustration below show how far apart the speakers can be placed at various ceiling heights while still providing good coverage for all listeners.

Ceiling Height	Spacing (Standing)	Spacing (Seated)
9-Foot Ceiling	5'7"	9'5"
10-Foot Ceiling	9'7"	13'5"
12-Foot Ceiling	13'7"	17'5"
14-Foot Ceiling	17'7"	21'5"



#### Surround Channel (SM55)

The SM55's low-profile design and wide area coverage also make it an excellent choice for surround channel applications in home theater systems.

#### 5.1-Channel System (see Figure 2)

- **Locate the left and right surround speakers on the ceiling between 2 feet and 6 feet behind the listening position. The speakers should be between 6 feet and 10 feet apart.**

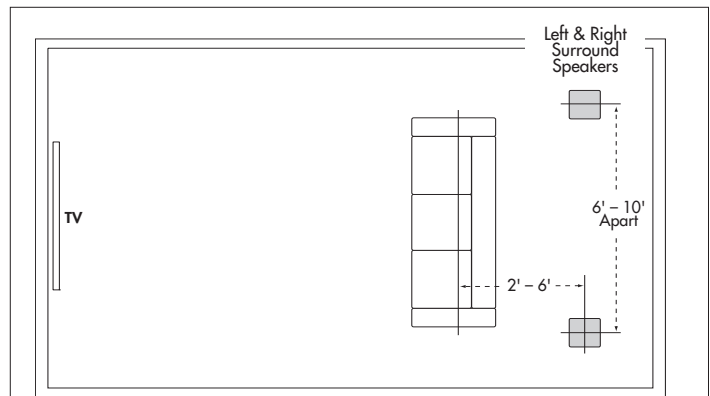


FIGURE 2: 5.1-CHANNEL SURROUND CHANNEL SPEAKER PLACEMENT

#### 7.1-Channel System (see Figure 3)

- **Left & Right Surround Speakers:** Place the left and right surround speakers directly to the sides of the listening position, between 6 feet and 10 feet apart.
- **Surround Back Speakers:** Place the surround back speakers between 2 feet and 6 feet behind the listening position. The surround back speakers should be closer together than the left and right surround speakers — between 3 feet and 6 feet apart.

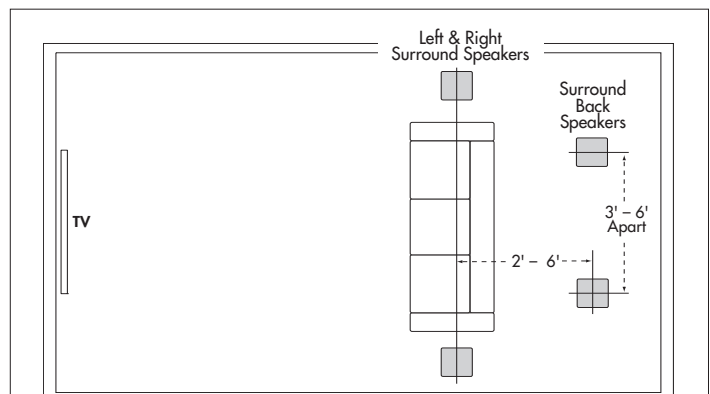


FIGURE 3: 7.1-CHANNEL SURROUND CHANNEL SPEAKER PLACEMENT

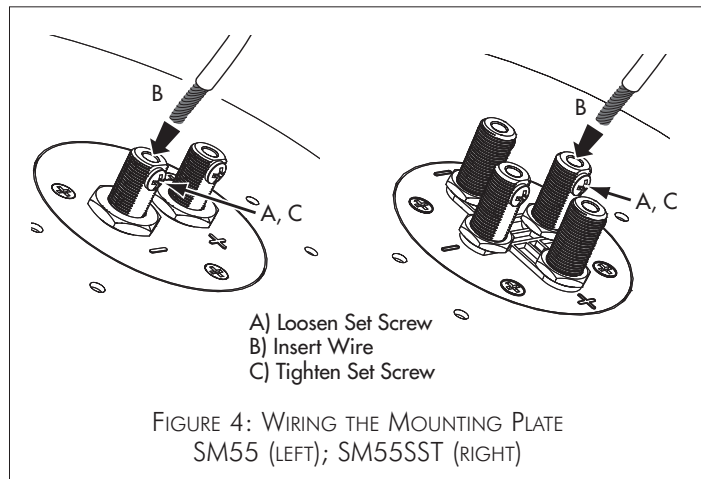
### Before Installation

1. Determine the location for the speaker (see *Speaker Placement*).
2. The SM55 and SM55SST Mounting Plates (available separately) are designed to install onto a J-box (single or double) that has already been mounted in the ceiling.

- The Mounting Plate allows the speaker to be installed after the ceiling has been finished. The Mounting Plate also allows the speaker to be rotated after installation to align it with design elements in room.
- 3. If there is no J-box in the ceiling, the speaker can be mounted directly on the ceiling surface, without using the Mounting Plate.
  - If the speaker is installed without the Mounting Plate it cannot be rotated after installation.

## Installation Using a J-Box

1. Run speaker wires through the ceiling or conduit, from the amplifier into the J-Box. Mark the wire's "+" and "-" leads.
  - Consult local building codes before running speaker wires through ceilings.
2. Bring the speaker wires through the J-Box and attach them to the binding posts on the back of the Mounting Plate. (The SM55 plate has one set of posts; the SM55SST plate has two sets, see Figure 4.) The binding posts will accept single banana plugs or bare wire.



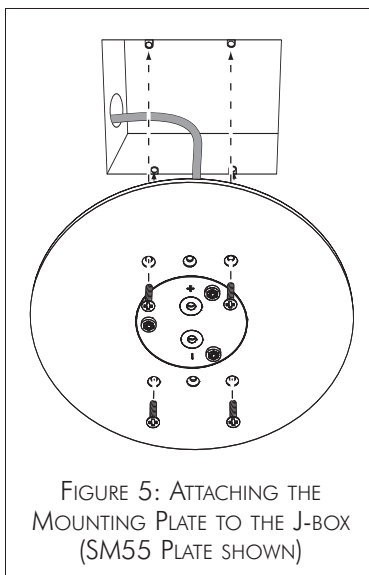
- Loosen the set screw on the binding post, insert the plug or wire, then tighten the set screw to secure the wire.

**IMPORTANT: When using bare wire, be sure that no stray "+" and "-" strands touch each other. (Stray strands that touch each other can cause a short-circuit that can damage the amplifier.)**

3. Use the 1½" x 6-32 flat head screws included with the Mounting Plate to attach it to the J-Box. (See Figure 5.)

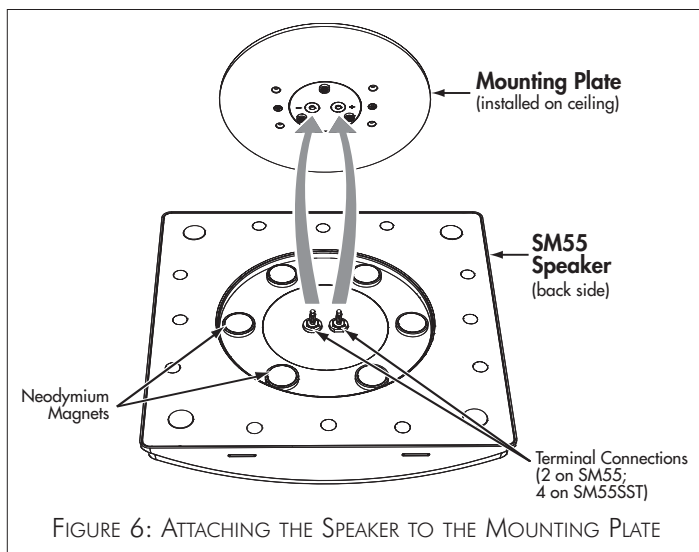
- Use two screws for a single-gang J-Box; use four screws for a double-gang J-Box.

4. The Mounting Plate is fitted with a paint plug that protects the speaker terminals if the ceiling is



painted after the Plate is installed. Remove the paint plug before installing the speaker.

5. To install the speaker, place the speaker against the Mounting Plate so that the male terminal connectors on the speaker fit into the female connectors on the Mounting Plate. The neodymium magnets on the speaker will secure the speaker to the Mounting Plate. (See Figure 6.)

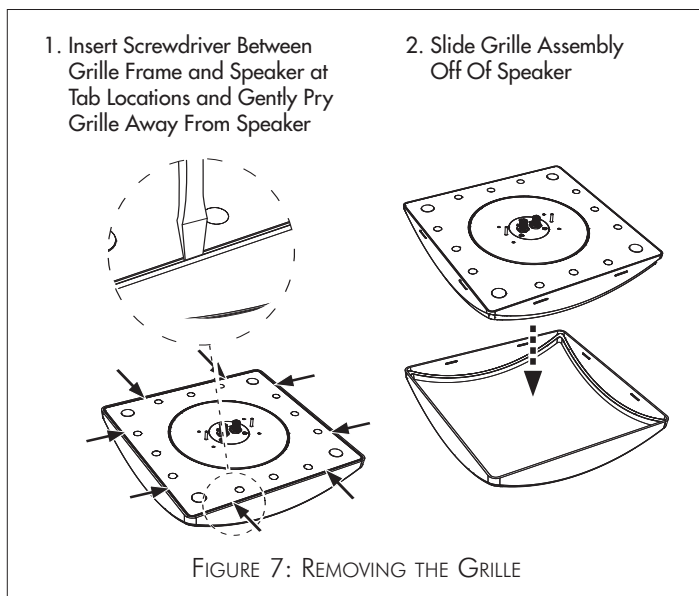


Be sure to align the "+" and "-" connectors on the speaker with the corresponding connectors on the Mounting Plate.

- After the speaker is installed you can rotate it to align it with design elements in the room. See *Speaker Adjustments: Rotating the Speaker*, on page 3.

## Installation Without a J-Box

1. Remove the grilles from the speakers.
  - The grilles are held on the speakers by 2 small tabs on each side of the grille frame. Use a flat-blade screwdriver to gently pry each side of the grille frame away from the speaker to release the tabs, and slide the grille off the speaker (see Figure 7).



## SONANCE SM55 & SM55SST SURFACE-MOUNT SPEAKER

2. Unscrew the male banana connectors from the bottom of the speaker and replace them with the supplied Speaker Terminal Screws (see Figure 8A).

3. Run speaker wires through the ceiling, from the speaker mounting location to the amplifier.

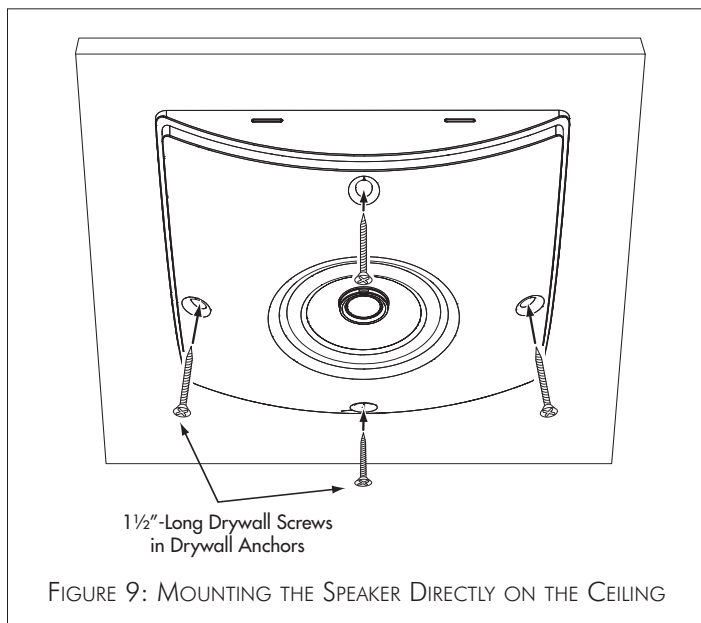
- Consult local building codes before running speaker wires through ceilings.

4. Strip  $\frac{1}{2}$ " –  $\frac{3}{4}$ " of insulation from each speaker lead. Twist the wire strands to ensure that there are no stray strands. (Stray strands that touch each other can cause a short-circuit that can damage the amplifier.)

5. Wrap the bare wire ends around the Speaker Terminal Screws and tighten the screws to secure the wires. Be sure to connect amplifier "+" to speaker "+" and amplifier "-" to speaker "-". (See Figure 8B.)

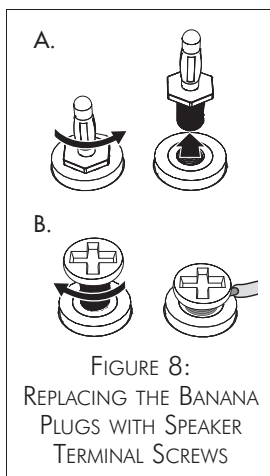
**IMPORTANT:** Be sure that no stray "+" and "-" strands touch each other. (Stray strands that touch each other can cause a short-circuit that can damage the amplifier.)

6. Feed any excess speaker wire back through the ceiling and place the speaker in the desired mounting location.
7. Mark the locations of the four mounting holes on the ceiling.
8. Drill holes at the marked locations and install drywall anchors into the holes.
9. Place the speaker at the mounting location again and drive four  $1\frac{1}{2}$ "-long drywall screws through the four mounting holes on the speaker and into the drywall anchors (see Figure 9).



**IMPORTANT:** Always use low-torque settings; NEVER over-tighten.

10. Replace the grilles on the speakers.



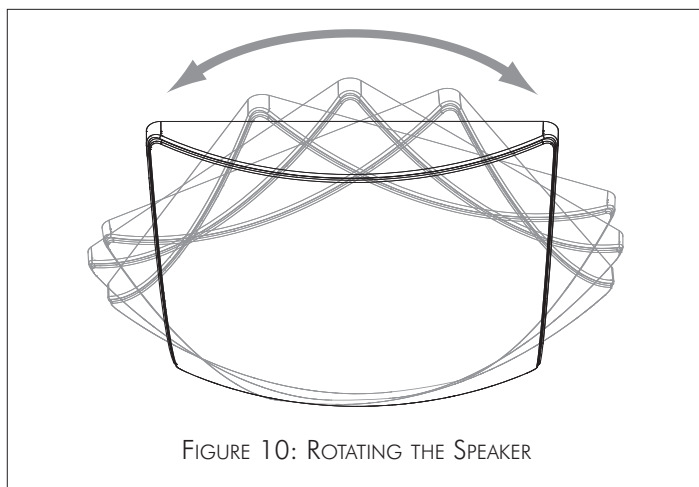
## Painting The Grilles

Please refer to the included *Painting Instructions* sheet.

## Speaker Adjustments

### Rotating the Speaker

When installed using the Mounting Plate, the SM55 and SM55SST can be rotated around their center axes after installation to align them with architectural or design elements in the room. (See Figure 10.)



NOTE: EXCESSIVELY ROTATING THE SPEAKER CAN TWIST THE SPEAKER WIRES IN THE J-BOX BEHIND THE MOUNTING PLATE, CAUSING THEM TO DISCONNECT, BREAK OR SHORT-CIRCUIT.

## Specifications

Tweeter:	(SM55) — 1" (25mm) Silk dome, Ferrofluid- cooled (SM55SST) — Two 1: (25mm) Silk domes, Ferrofluid-cooled
Woofer:	(SM55) — $5\frac{1}{4}$ " (133mm) Carbon fiber cone, with a rubber surround (SM55SST) — $5\frac{1}{4}$ " (133mm) Carbon fiber cone, with a rubber surround, dual voice coil
Frequency Response:	65Hz – 20kHz $\pm$ 3dB
Impedance:	8 ohms nominal; 6 ohms minimum
Power Handling:	5 watts minimum; 60 watts maximum
Sensitivity:	88dB SPL (2.83V/1 meter)
Grille Material:	Perforated Aluminum
Dimensions (W x H x D):	$10\frac{3}{4}$ " x $10\frac{3}{4}$ " x $2\frac{1}{2}$ " (273mm x 273mm x 63.5mm)
Shipping Weight:	(SM55) — 10 lbs (4.5kg) pair (SM55SST) — 5 lbs (2.3kg) each

## Technical Assistance and Service

If you have any questions about the operation or installation of this product, please call our Technical Assistance Department on any business day at (800) 582-0772 or (949) 492-7777; from 7 a.m. to 5 p.m., PST.

If your speakers should need repair or service, contact your Sonance Authorized Dealer for help, or use the following procedure:

1. Prior to calling, note the product's model number, serial number, purchase date, and the name and address of the dealer where you purchased the product.
2. Contact our Technical Assistance Department at the above number(s) and describe the problem the unit is experiencing. If applicable, they will issue a Return Authorization Number.

### **IMPORTANT: YOU MUST HAVE PRIOR AUTHORIZATION TO RETURN YOUR SPEAKER TO SONANCE!**

3. If you're directed to return the unit to Sonance for repair, pack the unit in its original shipping carton. If needed, you can obtain replacement packaging from us for a small charge. Note: it is best if you place the box into an additional outer "overcarton" before shipment to minimize a chance of theft in shipment. Please include a copy of the original bill of sale inside the package.
4. Contact a package delivery company such as United Parcel Service or Federal Express to arrange prepaid (not collect) shipping. Do not use the U.S. Postal Service.

### **IMPORTANT: Freight collect shipments will be refused.**

5. Write the Return Authorization Number on the outside of the shipping carton.

6. Ship the packaged unit to:

**Quality Assurance Department  
Sonance  
212 Avenida Fabricante  
San Clemente, CA 92672-7531**

## Limited Lifetime Warranty Coverage (U.S. Only)

**Sonance warrants to the original retail purchaser only that this Sonance product will be free from defects in materials and workmanship, provided the speaker was purchased from a Sonance Authorized Dealer.**

Defective products must be shipped, together with proof of purchase, prepaid insured to the Authorized Sonance Dealer from whom they were purchased, or to the Sonance factory at the address listed on this instruction manual. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk or loss or

damage in transit is to be borne by the purchaser. If upon examination at the factory or Authorized Sonance Dealer it is determined that the unit was defective in materials or workmanship at any time during this warranty period, Sonance or the Authorized Sonance Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. If this model is no longer available and can not be repaired effectively, Sonance, at its sole option, may replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, Sonance assumes no responsibility or liability for such modification. All replaced parts and product become the property of Sonance. Products replaced or repaired under this warranty will be returned to the original retail purchaser, within a reasonable time, freight prepaid.

This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product which has not been authorized or approved by Sonance. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions. This Warranty will be void if the Serial Number on the product has been removed, tampered with or defaced. This Warranty is in lieu of all other expressed warranties. If the product is defective in materials or workmanship as warranted above, the purchaser's sole remedy shall be repair or replacement as provided above. In no event will Sonance be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if Sonance or an Authorized Sonance Dealer has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply. All implied warranties on the product are limited to the duration of this expressed Warranty. Some states do not allow limitation on the length of an implied warranty. If the original retail purchaser resides in such a state, this limitation does not apply.

## Exclusions And Limitations

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose, or otherwise. The warranty is limited to Sonance products registered herein and specifically excludes any damage to loudspeakers and other allied or associated equipment which may result for any reason from use with this product. Sonance shall, in no event, be liable for incidental or consequential damages arising from any breach of this warranty or otherwise. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.



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Due to continuous product improvement, all features and specifications are subject to change without notice.

For the latest Sonance product specification information visit our website: [www.sonance.com](http://www.sonance.com)

SONANCE • 212 Avenida Fabricante • San Clemente, CA 92672-7531 USA

(800) 582-7777 or (949) 492-7777 • FAX: (949) 361-5151 • Technical Support: (800) 582-0772

[www.sonance.com](http://www.sonance.com)